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Palmer, F. G.  
1936-1937

San Francisco Bay region Sept. 1936

southern California Dec. 1936 - Jan. 1937

Contra Costa Co., Calif. March 1937





Palmer, F. J.  
1936 - 1937

S. F. Bay region Sept. 19-21, 1936  
Catalog of specimens  
#1419 - 1432

southern California Dec. 24, 1936 - Jan. 16, 1937  
Catalog of specimens  
#1433 - 1507



Palmer  
1936

Catalog

5 mi. NW Cazadero, Sonoma Co., Calif.

Sept. 19, 1936

- 1419 *Rana boylei*  
1420 *Triturus torosus*  
1421 " "  
1422 *Salamander*  
1423 " "  
1423A " "

Sept. 20, 1936

- 1424 *Chelymys marmorata*  
1425 *Salamander*  
1426 " "  
1427 " "  
1428 *Thamnophis*.

2 mi. N Ft. Ross, Sonoma Co., Calif.

Sept. 20, 1936

- 1429 ♀ *Nyctis* - -87-40-8-13 Tr. 7 Wt. 6.0g.  
1430 " "

Sept. 21, 1936

- 1431 ♂ *Clethrionomys californicus* - 152-41-19.5-11 Wt. 28.2g.  
SKEL. ONLY 1432 ♂ *Ceophloeus pileatus* - Wt. 275.0g. Testis = O

1100 ft., 1158 Columbia Ave., Ontario, San Bernardino Co., Calif.

Dec. 24, 1936

- 1433 ♂ *Thomomys bottae* - 183-64-28-6  
1434 ♀ " " - 202-62-28-6.5  
1435 ♀ " " - 215-72-29-7  
SKULL ONLY 1436 ♂ " " - 197-66-26-6.5





Palmer  
1937

Catalog

San Juan Creek, 500 ft., 8.5 mi. NE Capistrano, Orange Co., Calif.  
Jan. 2, 1937

- 1437 ♂ *Thomomys bottae* - 230-72-29-7  
1438 ♀ " " - 185-59-28-6.5  
1439 ♀ " " - 204-69-28-6  
1440 ♀ " " - 202-65-27.5-7  
1441 ♀ " " - 184-61-27-6  
1442 ♀ " " - 203-61-28-6.5  
1443 ♀ " " - 201-62-28-7  
1444 ♂ Jv. " " - 167-51-26-6

Chino Cr., 6 mi. SSE Chino, 600 ft., San Bernardino Co., Calif.  
Jan. 3, 1937

- 1445 ? *Fulica americana* - { Taken away from Marsh Hawk.  
but had been shot.

3 mi. NW Elsinore, 1350 ft., Riverside Co., Calif.

Jan. 7, 1937

- 1446 ♀ *Thomomys bottae* - 226-71-28-7  
1447 ♀ " " - 222-65-30-8  
1448 ♀ " " - 217-69-29-7  
1449 ♀ " " - 205-76-27-6.5  
1450 ♀ " " - 226-73-30-7  
1451 ♀ " " - 228-74-29-7  
1452 ♂ " " - 220-67-30-7

4 mi. SSE Elsinore, 1300 ft., Riverside Co., Calif.

Jan. 7, 1937

- 1453 ♀ *Thomomys bottae* - 200-61-27-8



Palmer  
1937

Catalog

Rainbow, 1043 ft., San Diego Co., Calif.

Jan. 8, 1937

1454 ♂ *Thomomys bottae* - 249-90-32-8

1455 ♀ " " - 215-68-28-6

3 mi. SSE Temecula, 1025 ft., Riverside Co., Calif.

Jan. 9, 1937

1456 ♀ *Thomomys bottae* - 214-64-29-7.5

1457 ♀ " " - 220-75-28-7

1458 ♂ " " - 240-78-30.5-8

1459 ♀ " " - 205-65-28-7

1460 ♀ " " - 202-60-27-7

1461 ♂ " " - 243-83-32-8

1462 ♀ " " - 205-63-27-7

1463 ♀ " " - [181]-[50]-25.5-6.5

1464 ♂ " " - 230-69-30-7

1465 ♀ " " - 207-65-28-7

1466 ♀ *Reithrodontomys megalotis* - 152-84-18-18

1467 ♀ " " - 136-71-17-18

1468 ♂ " " - 134-71-17-17.5

1469 ♂ " " - 144-74-17-17

1470 ♂ *Dipodomys agilis* ? - 297-183-42-16

1471 ♂ " " - 296-184-41-16.5

1472 ♂ " " - 273-162-41-15.5

1473 ♀ " " - 272-153-40.5-16

1474 ♂ *Peromyscus maniculatus* - 142-63-21-16.5

1475 ♂ " " - 136-58-20-15.5





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1937

Catalog

1100 ft., 1158 Columbia Ave., Ontario, San Bernardino Co., Calif.

Jan. 10, 1937

1476 ♂ ad. *Hylorichthys guttata* - Picked up dead. Testis = 0  
Justin, 100 ft., Orange Co., Calif.

Jan. 13, 1937

1477 ♀ *Scapanus latimanus* - 161-35-18

1478 ♀ *Rattus* sp.? - 401-227-35-23

7 mi. ENE Ontario, 1050 ft., San Bernardino Co., Calif.

Jan. 15, 1937

1479 ♂ *Dipodomys agilis* - 282-170-42-16

4 mi. SE Corona, 1000 ft., Riverside Co., Calif.

Jan. 15, 1937

1480 ♂ *Thomomys bottae* - 219-62-29-7.5

1481 ♀ *Dipodomys stephensi* - 272-152-38-16

1100 ft., 1200 block Columbia Ave., Ontario, San Bernardino Co., Calif.

Jan. 15, 1937

1482 ♂ *Thomomys bottae* - 255-83-31-7

1483 ♀ " " - 230-68-29-7

1484 ♀ " " - 227-68-29.5-7

1485 ♀ " " - 230-74-28.5-7.5

1486 ♀ " " - 217-78-28-7

San Jacinto Val., 5 mi. ENE Lakeview, 1500 ft., Riverside Co., Calif.

Jan. 16, 1937

1487 ♂ *Thomomys bottae* - 240-77-31-8.5

1488 ♂ " " - 212-73-29-7

1489 ♀ " " - 224-75-28-8.5

1490 ♀ " " - 232-75-29-7



Palmer  
1937

# Catalog

San Jacinto Val., 5 ms. ENE Lakeview, 1500 ft., Riverside Co., Calif.

Jan. 16, 1937

1491 ♀	<i>Thomomys bottae</i>	- 208-65-28-6.5
1492 ♀	" "	- 223-73-28.5-6.5
1493 ♂	" "	- 210-62-29.5-7
1494 ♂ Jv.	" "	- 182-61-29-5.5
1495 ♀ Jv.	" "	- 178-57-27.5-5.5
1496 ♂	<i>Dipodomys merriami</i>	- [214]-[120]-37-8
1497 ♂	<i>Dipodomys agilis</i>	- 300-182-43-18
1498 ♂	" "	- 303-187-44-16.5
1499 ♀	" "	- 295-174-42-16.5
1500 ♀	" "	- 287-170-42.5-17
1501 ♀	" "	- 291-182-41.5-17
1502 ♂	" "	- 298-185-43-20
1503 ♂	<i>Peromyscus eremicus?</i>	- 205-115-21-20
1504 ♀	" "	- 188-95-21-19
1505 ♂	" "	- 200-110-21-19
1506 ♂	" "	- 204-112-21-18.5
1507 ♀	" "	- 204-113-21-19

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Palmer, F. G.

1936 - 1937

southern California

Dec. 23, 1936 - Jan. 16, 1937

Itinerary



Palmer  
1936  
+ 1937

## Itinerary

1100 ft., 1158 Columbia Ave., Ontario, San Bernardino Co., Calif.

Dec. 23 At my home in Ontario made 4 sets of Macabee traps for gophers in the garden.

Dec. 24 Found four Thomomys bottae in the 4 sets of Macabee gopher traps set in fresh burrows in the garden.

1937 Laguna Beach, Orange Co., Calif.

Jan. 1 Left Ontario yesterday afternoon and drove via Chino, Santa Ana Canyon, Oline, Justin & Irvine to Laguna Beach. Today drove south on the coast highway <sup>via</sup> Dana Point to Doheny Park where we turned left to San Juan Capistrano Mission & town of Capistrano, a distance of about 11 miles. From Capistrano, traveled NE up San Juan Cañon along San Juan Creek which is quite a sizable stream following the 2 or 3 days of rain. Followed up the Cañon to San Juan Hot Springs, a distance of 13 mi. There, found I was getting out of the valley bottom country which looked best for gophers, so turned around and retraced route back about 2 miles.

There I stopped and found good





Palmer  
1937

## Itinerary

Jan. 1  
Cont'd. Laguna Beach Calif to San Juan Creek  
fresh gopher workings. These were easy to see, since all old mounds had been packed down and washed over by recent heavy rains. The area trapped was on the NW side of the road, between the road and the creek. The creek <sup>bed</sup> and some of the ground nearby was rocky, but much of the cañon bottom - here about  $\frac{3}{8}$  mi. wide - is level and made up of fairly deep dark brown sandy loam. Gopher workings were found here only in this type of soil. In the valley bottom were numerous sycamores (along the stream), some coast line oak (Quercus agrifolia), much prickly pear (Opuntia sp.) and sage (Artemisia californica?) and here + there scattered clumps of Rhus integrifolia and R. laurina - 6-10 ft. in height. The ground surface was covered with Erodium and grasses <sup>(mostly foxtail)</sup> and appeared very green.

At this locality - San Juan Creek ft.,  
8.5 mi. NE Capistrano, Orange Co., Calif.

I made 15 sets with 23 Macabee gopher



Palmer  
1937

## Itinerary

Jan 3  
cont'd.

Ontario, S.B. Co., Calif. cont'd.

in the adobe soil of the back yard and set 1 rat trap in the garage where something had been eating stored banana squashes.

Continued on to Ontario via Olive and Santa Ana Cañon, turning off the Cañon road at the Rincon<sup>at</sup> cutoff. Where this road crosses Chino Creek I saw a Marsh Hawk in a grain field trying to lift something from the ground in its claws as it flew up. It was unable to and flew away without it. I stopped the car & went over to investigate & found a freshly killed Mudhen which I brought home with me. This locality = Chino Cr., 6 mi. SSE Chino, 600 ft., San Bernardino Co., Calif. When I skinned the bird I found several shot in it, mostly in the muscles and they appeared not have penetrated very far. The humerus of the left wing was broken and the bird was probably dead or crippled when the hawk got it.



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Itinerary

San Juan Creek. (cont'd.)

Jan. 1  
cont'd. traps in fresh burrows.

While setting traps, heard many Cactus Wrens and 1 Gnatcatcher. Also saw Mockingbird, Calif. Thrasher, Brown Towhee, Spotted Towhee, Calif. Jay, Calif. Quail, Bewick Wren and Gambel Sparrows.

Both going to & coming from the traps, I saw several flocks of crows along San Juan Creek. These flocks ranged from 40 ± to 200 or 300 in number and were, for the most part, roosting in willows along the creek.

Jan. 2 Returned to the traps this A.M. on San Juan Creek. Found 8 Thomomys bottae in 15 sets of Macabee traps. Several of the traps were sprung by large masses of dirt which the gophers had pushed into them. Apparently the gophers were busy repairing damage done to their burrows by the recent rains.

Jan 3 Ontario, San Bernardino Co., Calif.  
Returned home today from Laguna Beach. Stopped in Justin at the home of my aunt, Miss May Greenleaf, on south "B" St. There I set 1 mole trap in a fresh surface burrow



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1937

Itinerary

Jan 5. Ontario to Newport Beach -

This afternoon went down again (I had previously been down Dec. 26) to see if Mr. F. H. Crocker had located where a small whale had been buried that washed in last summer. By means of photographs we located as nearly as possible where the whale had been buried. However, recent storms had washed out the beach so that it is probable that the whale washed out too. However, I intend to go back in a few days and dig to see if it might still be there.

Jan 6 This afternoon drove down to Elsinore Set Macabee gopher traps in fresh burrows in a field 3 mi. NW Elsinore 1350 ft., Riverside Co., Calif. There I made 12 sets for gophers in soil that varied from reddish clayey type to heavy black type. The field was covered with Erodium with some old arrow-weed stalks and clumps of foxtail grass on the hummocks. All the lower parts of the field were flooded and the burrows full of water. The





Palmer  
1937

## Itinerary

Jan 6  
cont'd. Elsinore, Riverside Co., Cont'd.  
Traps were mainly set on the slight hummocks or ridges where the burrows were not under water.

Drove on down the south side of the lake to a place 4 mi. SSE Elsinore, 1300 ft., Riverside Co., Calif. Then made three sets of Macabee traps in fresh burrows in an orchard. Soil here was brown and slightly clayey.

Returned to Ontario in the rain.

Jan 7 Left Ontario 11 A.M. and drove via Corona and Temescal Cañon to Elsinore. In the 12 sets 3 mi. NW Elsinore, 1350 ft., Riverside Co., Calif. I found 7 Thomomys bottae. Then drove on and picked up the traps 4 mi. SSE Elsinore, 1300 ft., Riverside Co., Calif. where there was 1 Thomomys bottae taken in the 3 sets.

Then drove on down the road through Wildomar, Murrieta and Temecula and <sup>at 2 mi. S of Temecula</sup> ~~then~~ turned off east on the road to Aguanga. Ate lunch on the way and arrived at Aguanga about 3 P.M. in a snowstorm. Decided I couldn't camp out in the storm so



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## Itinerary

Jan. 7 Elsinore to Aguanga. Cont'd  
cont'd. stopped at The Aguanga store and asked if there were any auto camps in that region. Learned there was one at Hemet and that cars had been going through on the Aguanga-Hemet road. I tried about a mile of that road but it was slipping and sliding in soft mud all the way and decided 20 mi. of that was too much so I turned back and returned to Temecula & then south on the inland route about 4 mi. where I found cabins at Rainbow. At Rainbow made 7 sets with Macabee traps in fresh gopher burrows. Soil there is reddish clayey type. Traps were set in open fields overgrown with Erodium and weeds with some Artemisia occidentalis. Stayed at Rainbow and skinned gophers while the rain & had beat down on the roof of the cabin - glad I wasn't out in it.

Jan. 8. Rainbow, 1043 ft., San Diego Co., Calif.  
Took up 7 sets of gopher traps here this A.M. & found 2 Thomomys talpae in the traps.



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## Itinerary

Jan 8. Rainbow, San Diego Co. Cont'd.

Cont'd. Decided to make another try for the Aguanga country so packed up and left. Drove north over the Red Mountain grade + looking east could see nothing but rain + very black clouds, altho it is clear here. So decided not to try it.

Instead set gopher traps, 3 mi. SSE Temecula, 1025 ft., Riverside Co., Calif., at the side of the highway along the edge of a field formerly cultivated. There I found many fresh mounds in the heavy black soil which is almost adobe. Set 17 sets of Macabee traps there. In the evening put out 45 gov. size mouse traps in a wash along the side of the creek that here flows toward Temecula. Traps set 15-20 steps apart on sandy ground with scattered Opuntia and Cholla cactus and scattered bushes of Artemisia occidentalis and Chrysothamnus. Then returned to Rainbow and stayed again at the auto camp.

1





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1937

## Itinerary

Jan. 9 3 mi. SSW Temecula, 1025 ft., Riverside Co.  
cont'd. This A.M. left Rainbow about  
8 and drove to this locality. In 17  
Macabee gopher traps here caught 10  
Thomomys bottae. In 45 gov.-size  
mouse traps caught last night the  
following species: Reithrodontomys  
megalogis, 5 (2♂, 2♀, 1♀ juv.), Peromyscus  
maniculatus, 7 (4♂, 3♀); Dipodomys  
agilis, 4 (3♂, 1♀). But caught no  
D. merriami for which I was especially  
trapping.

Ontario, 1100 ft., San Bernardino Co., Calif.  
Drove from Temecula to Ontario  
via Murietta, Elsinore, Alhambra  
and Corona arriving shortly before  
noon.

Jan. 10 1100 ft., 1158 Columbia Ave., Ontario, San  
Bernardino Co., Calif.

This A.M. picked up a dead  
Pylocichla guttata under a lemon  
tree in our back yard. It is probable  
that the bird either froze (temperature  
as low as 22 degrees recorded last  
night) or that the heavy smudge  
from orange orchard heating may  
have contributed in some way, both



Palmer  
1936

Itinerary

1100 ft., 1158 Columbia Ave., Ontario, S. B. Co.

Jan 14 This afternoon made 15 sets of Macabee gopher traps in fresh burrows in vacant lots in the 1200 block of Columbia Ave. Then drove east on 4<sup>th</sup> St. to its end 7 mi. E Ontario, 1050 ft., San Bernardino Co., Calif. There I set 40 gov.-size mouse traps on sand dune area covered with low brush - Artemisia californica, Salsola kali (dead), Rhus trilobata, some green Hordeum sp. and a few coyote grounds - Cucurbita foetidissima.

This afternoon I had a visit from two fellows from Corona who have done some mounting of <sup>birds</sup> ~~skins~~ and animals but want to know the scientific method of skinning. I loaned them some traps and they are going to try to get me some specimens from their region.

Jan 15 In 15 sets for gophers in the 1200 block on Columbia Ave., caught 10 Thomomys talpae (5♂, 5♀).

In 40 gov.-size mouse traps 7 mi. E Ontario, 1050 ft., S. B. Co., Calif.



Palmer  
1937

## Itinerary

Ontario, 1100 ft., S. B. Co. Calif.

Jan. 13. This A.M. left Ontario and drove via Chico, Oriskany, Santa Ana Cañon, Olive, Justin to Newport Beach. There I with the help of Mr. David Dundas of Ontario spent most of the day digging on the beach for the small whale buried there (see previous notes Dec. 26 and Jan. 5) and spent a good deal of time probing the sand with a long, sharp pointed iron rod with a T handle but failed to find any trace of the whale.

Returned to Justin, 100 ft., Orange Co., Calif. where I stopped at the home of my aunt Miss May Greenleaf on south "B" st. There I found a mole in the mole trap I had set on Jan. 3. ~~to~~ and a Rattus r. alexandrinus in the rat trap I had set in the garage on the same day. Both had apparently been caught some time before but were in fair shape owing to the cold weather we have been having. Then traveled on home to Ontario.





Palmer  
1937

## Itinerary

Jan 15  
cont'd. 1 mi. E Ontario, 1050 ft., cont'd  
caught during last night: Dipodomys agilis, 1 ♂; Peromyscus maniculatus, 7 (5 ♂, 2 ♀); Reithrodontomys megalotis, 7 (4 ♂, 3 ♀); Mus musculus 1 ♂ for a total of 16 mammals. Many of the traps were frozen so that catch would probably have been higher but for that factor. Was disappointed in not catching Dipodomys merriami here as I wanted them especially and have taken them here before.

The 2 fellows from Corona, Rollin & Robert Miller brought in several mammals from 4 mi. SE Corona, 1000 ft., Riverside Co., Calif. Of these I saved 1 Dipodomys stephensi and 1 Thomomys bottae. Then showed them how to prepare study skins of mammals. Banning, Riverside Co., Calif. This afternoon left Ontario about 2 and drove via Riverside, Box Springs, March field & Valverde where I turned east across the Peris Valley through Lakeview to a spot in: San Jacinto Nat.





Palmer

## Itinerary

### Banning, Calif cont'd.

Jan. 15  
cont'd.

5 mi. E NE Lakeview, 1500 ft., (Riverside Co., Calif. This place was at the edge of the valley on the lower slopes of the foothills on the Moreno-San Jacinto highway (Foothill Road at Bridge St. of the So. Cal. Auto Club Map for Riverside Co.). There I found numerous gopher workings in the fine soil. Soil was fine, brown, slightly sandy loam overlaid with a thin layer <sup>( $\frac{1}{2}$ "-1")</sup> of decomposed granite. Made 13 sets of Macabee traps in burrows with fresh mounds. Also set 40 gov.-size mouse traps around the base of the hills. Traps set 10-20 steps apart on decomposed granite or bare earth in brush 2-4 ft. high. Plants mainly Artemisia californica, Salvia apiana, Salvia mellifera, Eriogonum fasciculatum, and a low growing whitish leaved plant which I think is a composite. In large openings were some Brassica nigra (?) and much Erodium sp. forming a mat on the ground. After setting traps drove on via Jackrabbit Trail + Beaumont to the home of my uncle + aunt Mrs. and Mrs. A. L. Brankamp in Banning.



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## Itinerary

Ontario, San Bernardino Co., Calif.

Jan. 16. This A.M. drove from Banning back through Beaumont & Jackrabbit Trail to my traps at: San Jacinto Val., 5 mi. ENE Lakeview, 1500 ft., Riverside Co., Calif. 13 sets of Macabee gopher traps had caught 9 Thomomys bottae during the night. In 40 gov.-size mouse traps caught 24 mammals of the following species: Dipodomys merriami, 1 ♂; Dipodomys agilis, 10 (5 ♂, 5 ♀); Reithrodontomys megalotus, 1 ♀; Peromyscus eremicus (or truei?), 7 (3 ♂, 3 ♀); P. maniculatus, 5 (3 ♂, 2 ♀). Returned to Ontario via Moreno, March Field, Box Springs, and Riverside.



Palmer, F. G.  
Contra Costa Co., Calif.  
March, 1937



Palmer, F. G.

1937

Contra Costa Co., Calif. Mar. 6-7, 1937

Catalog of Specimens  
# 1508 - 1513

Itinerary

Species accounts





Palmer  
1937

Catalog

2 1/2 mi. SANTIACK, 250 ft., CONTRA COSTA CO., CALIF.

MARCH 6, 1937

1508 *Mephitis mephitis* - Skull only  
Pick up.

MARCH 7, 1937

1509 ♂ *Peromyscus maniculatus* - 140-59-20-162H.14.8g.

1 mi. SANTIACK, 100 ft., CONTRA COSTA CO., CALIF.

MARCH 7, 1937

1510 ♂ *Reithrodontomys megalotis* - 145-80-18-14.52H.8.1g.

1511 ♂ " " - 137-73-18-132H.7.4g.

1512 ♂ " " - 137-69-16.5-132H.8.2g.

1513 ♂ *Peromyscus maniculatus* - 147-67-19-162H.16.0g.



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## Itinerary

### Berkeley to Antioch.

March 7.

Yesterday afternoon about 2 left Berkeley with D. H. Johnson and E. J. Hooper and traveled via Fish Ranch road, Lafayette, Walnut Creek + Pittsburgh to Antioch.

From there traveled south to the base of the hills where we searched for areas which might harbor Perognathus longimembris. Most of the country looked very poor for them, in my opinion, being largely grassland, heavily grazed by sheep or cattle or old stubble fields now covered with a new growth of young grain 2-8 inches high. After looking over several places we found a hilltop 2 1/2 mi. S Antioch, 250 ft., Contra Costa Co. Calif. which was bare of grass and somewhat gravelly with hard baked soil. There I set 25 gov. - size mouse traps with oatmeal + birdseed bait partly on grassy hillside and partly on the bare hilltop. Picked up a skull of Mephitis mephitis near a den which seemed to be occupied at present by a skunk.

Then drove down the road to a place on the flat below the hills: 1 mi. S Antioch, 100 ft., Contra Costa Co., Calif. There I set 40 gov. size mouse traps



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## Itinerary

March 7  
cont'd.

1 mi. S Antioch, 100 ft., Contra Costa Co., Calif.

Cont'd.

Along the side of the road. Most of these were set in well marked runways, which appeared to be those of Microtus, in the tall grass.

Ate in Antioch and went back to 2 1/2 mi. S Antioch to sleep.

This A.M. found 18 Peromyscus maniculatus in 24 traps on the hill 2 1/2 mi. S Antioch, 250 ft., Contra Costa Co., Calif. Many traps had been sprung by sheep.

Went on down to 1 mi. S Antioch, 100 ft., Contra Costa Co., Calif. The 40 traps

There had caught: Reithrodontomys megalotis, 3 ♂; Peromyscus maniculatus, 1 ♂; Mus musculus, 6 (4 ♂, 2 ♀).

Returned to Berkeley via Somersville, Nortonville, Walnut Creek, Lafayette + Claremont Canyon.



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Reithrodontomys megalotis

1 mi. S Antioch, 100 ft., Contra Costa Co., Calif.  
March 7 Caught 3<sup>♂</sup> in 40 gov. - size mouse traps  
All were taken in well made runways  
in grass, mixed green and dry, 6"-  
18" tall. Most of the runways ran  
along beneath the lower wire - which  
was about 5 inches off the ground of  
a barbed wire fence. All traps set along  
the side of the road outside a field of  
young grain. It is probable that the  
runways were, for the most part, made  
by Microtus, since they were larger than  
any I have seen which appeared to be  
used by Reithros. only.





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Peromyscus maniculatus

2 1/2 mi. S Antioch, 250 ft., Contra Costa Co., Calif.  
March 7. Caught 1 ♂ ad. in 24 gov. - size mouse traps. This one was taken at the top of a limestone outcrop on a low hill which was, for the most part, covered by grass and annuals 1 1/2 - 2 inches high. The whole area was being heavily grazed by sheep.

1 mi. S Antioch, 100 ft., Contra Costa Co., Calif.  
Caught 1 in 40 gov. - size mouse traps. Taken in a runway (Microtus?) in grass + mixed green and dry - 6" - 18" high along a roadside. The mouse had apparently come out of a small burrow just at the side of the runway. This burrow had a pile of fresh dirt at its entrance. A comparison of my 1 mouse with the numbers of caught by E. J. Hooper and D. H. Johnson in more open fields of young grain nearby may indicate a preference for the latter type of habitat here.



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Mus musculus

1 mi. S Antioch, 100 ft., Contra Costa Co., Calif.

March 7. Caught 6 (4♂, 2♀) in 40 gov.-size  
mouse traps set in runways in tall  
grass along the roadside.

















